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**REPORT ON THE WORK OF THE 1922 SEASON IN THE PIEDRA PARADA
ARCHAEOLOGICAL FIELD.**

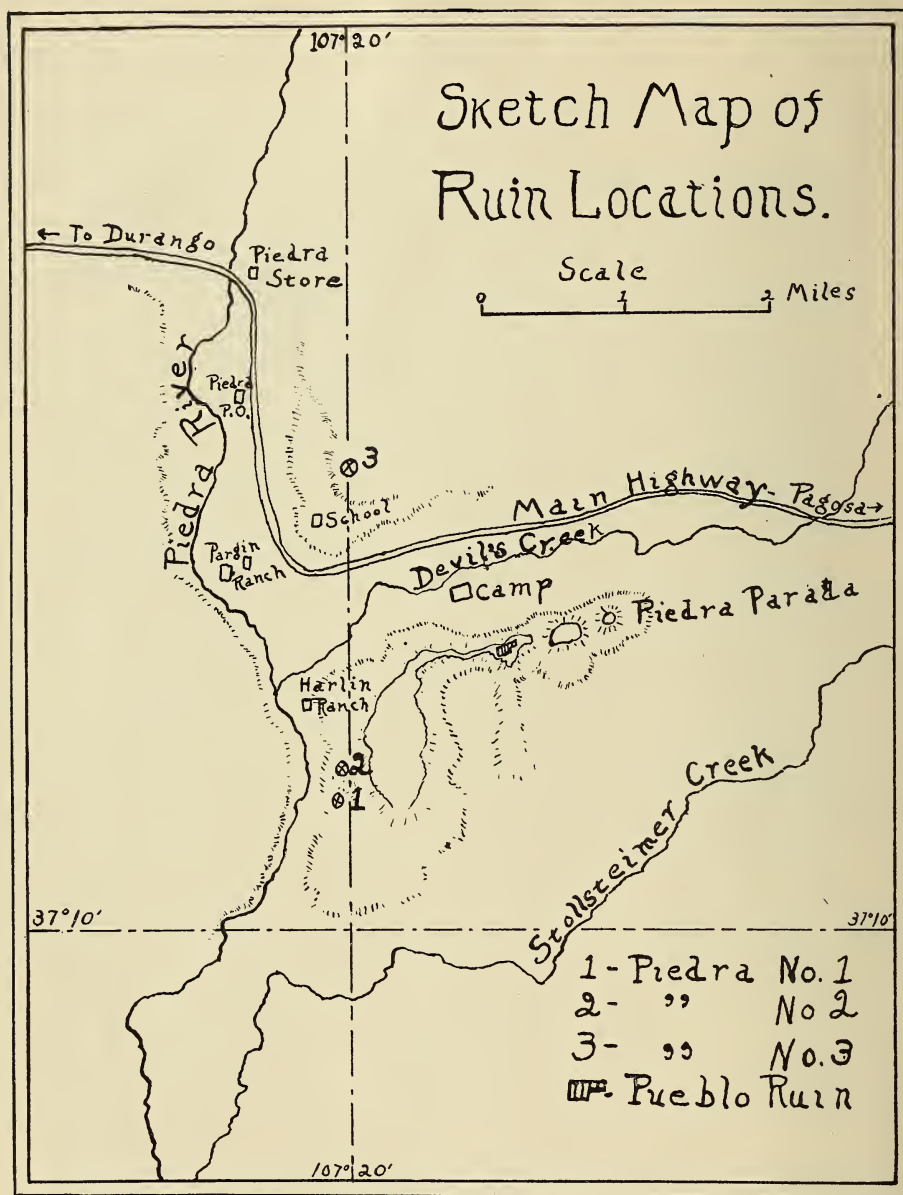
By FRANK H. H. ROBERTS, JR.

In the summer of 1921 the University of Denver and the State Historical and Natural History Society of Colorado jointly sent an expedition into the Piedra Parada archaeological field near Pagosa Springs, Colorado. The results of the first season's work have been published in two bulletins, the Bulletin of the University of Denver for November, 1921, and a pamphlet, "Archaeological Research in the Northeastern San Juan Basin of Colorado During the Summer of 1921," published jointly by The State Historical and Natural History Society of Colorado and the University of Denver. The success of the expedition in 1921 warranted the sending of a second expedition in the summer of 1922, to continue the work begun in the previous year. The funds for this second undertaking were provided by the University of Denver and its friends and by friends of the Historical Society.

The personnel of the second expedition consisted of J. A. Jeancon, Curator of Archaeology and Ethnology at the State Museum, director; Frank H. H. Roberts, Jr., Instructor in the University of Denver, assistant director; W. P. D. Clark, Knute W. Kirkgaard, Arthur W. Hiner, Warren S. Strickland, Owen P. Cutler, Loren J. Wagstaff, students of the University; Henry B. Roberts, and Joseph Galloway, cook. The expedition left Denver on June 12th for Pagosa Springs. Camp was made twenty-two miles west of Pagosa Springs on the same site used in 1921, and the season's work was started.

The ruins comprising the Piedra Parada field are situated along the Piedra River twenty-two miles west of Pagosa Springs. The mounds indicating these ruins begin a short distance south of the point where the Pagosa-Durango highway crosses the Piedra, and extend down the river for a distance of about eighteen miles. Along the lower benches of the mountains bordering the Piedra valley and just above the river are vast numbers of the early type of prehistoric habitation known as the pit-house. In traveling eastward from the river one comes upon a higher type of house on each succeeding bench until, when the tops of the small plateaus and mesas are reached, the true type of pueblo or community house is found.

The entire region in which these remnants of a Pre-Columbian civilization are found is notable for its rugged beauty. It lies in the upper San Juan watershed, and the many mountain ridges have been cut by streams flowing from the continental divide. The country is composed of many small and comparatively deep canyons, plateaus, and small mesas, and, finally, the relatively broad, rich valley of the Piedra River itself. The fertile soil of the valleys, the wooded slopes of the hills, the practically never-failing water supply of the Piedra and the natural defenses offered by the mesas could not but attract a primitive people and, judging by the mute reminders of their bygone civilization, held them for many generations, perhaps even for centuries, in that vicinity.



The excavations of the two seasons were made in the immediate vicinity of what is known as the Piedra Parada or the Chimney Rock. The Piedra Parada rises to an elevation of more than 1,200 feet above the floor of the valley. Several hundred feet west of this formation is another of the same type but bearing no name. There is a considerable break between the latter and the end of the Piedra Parada mesa. From the point where the mesa itself ends, the entire formation slopes away in a generally southwestern direction until, by a series of benches, it finally reaches the river two miles to the west. The highest point of the Piedra Parada mesa has an altitude of 7,735 feet and is triangular in shape. On it is located the large pueblo which occupied, to a

great extent, the attention of the two expeditions, and also the ruin called the Guard House which was excavated during the season of 1921. From the west end of the Guard House one drops down to the lower mesa by a neck of land only a few feet in width. On the lower mesa are 109 mounds, indicating buried homes of the ancient inhabitants. The lower mesa has an altitude of 7,500 feet but slopes away rather abruptly towards the river.

The work of the summer of 1922 was devoted to four sites, three of the pit-house type and the large pueblo on the top of the Piedra Parada mesa. In addition to this Mr. Jeancon and Mr. Wagstaff made several reconnaissance trips to various parts of the surrounding territory for the purpose of locating ruins and making, as far as possible without excavation, a tentative comparison of their relation to those of the group on which excavation was being conducted. The results of these trips will be included in the report of the entire summer's work which is to be issued at a later date.

In addition to the work of excavation the members of the expedition had the pleasure of visiting other ruins located in the southwest. One group went to Aztec and the Chaco Canyon in New Mexico, returning by way of the Mesa Verde. They secured considerable information of great value in the comparative study of the Piedra ruins. The second group, which was accompanied by Dr. E. B. Renaud of the Department of Archaeology and Anthropology, University of Denver, visited Aztec, Mr. Earl Morris' camp in the Red Horse Gulch country, the Mesa Verde, Yucca House National Monument and the tower ruins in the McElmo Canyon. This gave the students an opportunity to see many of the large and well known fields in other areas of the southwest.

Mr. Owen P. Cutler devoted the summer to a study of the geology, flora, and fauna of the Piedra Parada region. He was joined by his father, Dr. I. E. Cutler, Professor of Biology, University of Denver, in August and the two completed the work. The results of this work will be included in the main report for the season.

In dealing with the work of the season of 1922 the various sites studied will be taken up in the probable order of their antiquity.

PARGIN RANCH PIT-HOUSES.

On the first bench above the river to the east of the Pagosa-Durango highway, a short distance north of the schoolhouse which is located several hundred feet from the point where the road turns north toward the Piedra post-office, are many groups of mounds covering the disintegrated remains of the earliest types of pit-houses to be found in this region. (Sketch Map, No. 3.) These mounds are on land belonging to Mr. Doll Pargin, and it was through the kindness of the owner that the members of the expedition were permitted to work at this site. Excavations were made in several of these mounds, but it was impossible to determine the size, shape, or quality of the houses originally located there because of the extent to which they had been subjected to weathering influences. In two instances two opposite walls of rooms were uncovered but the remaining portions could not be located on account of the advanced stage of decay of the structures.

One of the mounds opened in this group proved rich in artifacts but furnished practically no answer to the question regarding the type of house. A large thin sandstone slab was uncovered, and when it was removed a large shattered olla or storage jar, was found beneath it. This jar was of the plain, undecorated type of pottery and by its side was a much smaller one of the same type. The olla contained a number of animal bones and possibly a few human bones, although certain identification of the latter has not been made, due to their poor state of preservation. In addition to these bones the olla contained a coiled ware pitcher with a broken handle; a natural formation bird fetish; paint grinding stone; four spirifera shells; three quartz crystals; a selenite crystal; a fossil amenite impression; a natural concretion probably used as a fetish. In the small pitcher, taken from the olla, was a pendant of black stone, similar to jet, with two holes drilled at one end for the purpose of suspension.

The small bowl, which was lying next to the olla, contained what was apparently a medicine man's outfit comprising a medicine stone, two spear points,

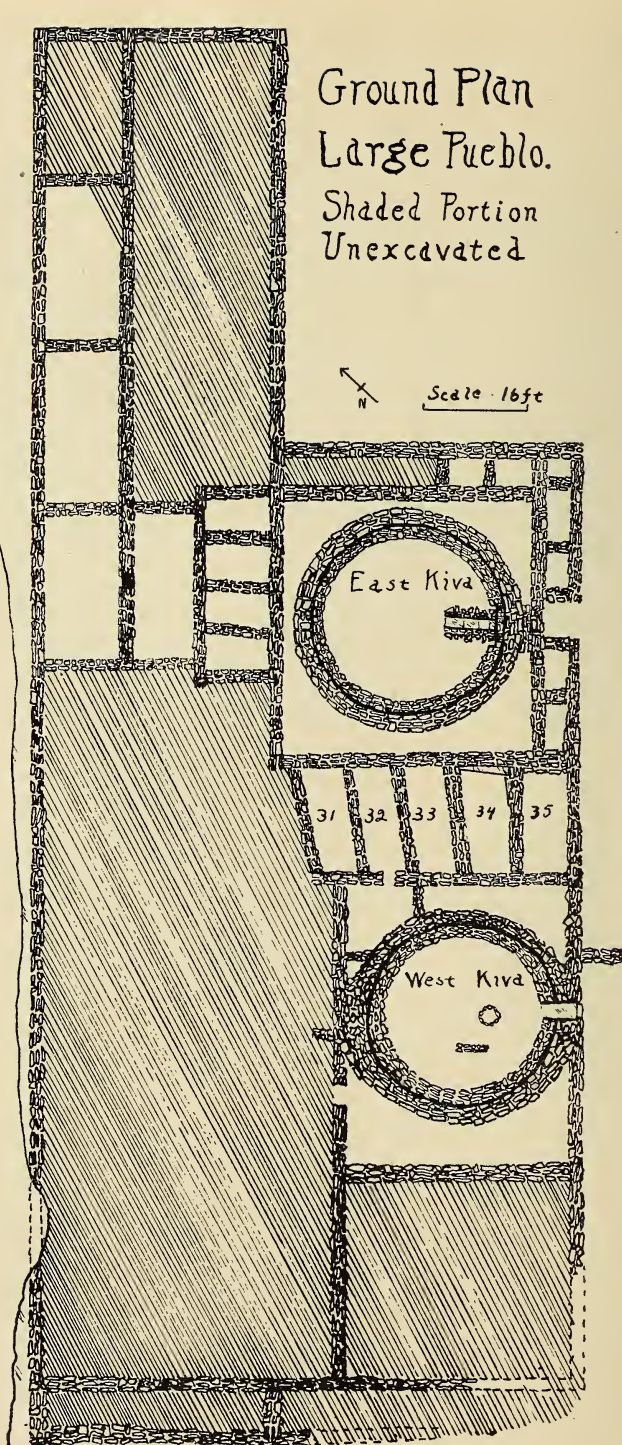


Plate 3. Ground Plan of Large Pueblo on Piedra Parada Mesa. Shaded Portion Unexcavated.

a large crinoid, small quartz crystals, a fossil clam shell cast, two spirifera shells, a flaking tool, and a petrified crinoid.

Later excavation at this point uncovered the pieces of a large plain ware bowl with handles, a small mug or tumbler-shaped vessel of very crude type, a pipe or cloud blower, a small heart-shaped bowl and a small gourd-shaped vessel. All of these were of the undecorated ware. Sherds of several coiled vessels were also secured at this site.

Work on a mound 30 feet north of the above location failed to disclose anything beyond two walls running parallel in a general east and west direction. They were of the cobblestone type of what has been called the second stage in the pit-house chronology. A few sherds of plain and coiled ware vessels comprised all of the artifacts found at this location.

At a distance of a hundred feet north of this second mound a third one was opened. Large quantities of burned roofing material, a few sherds, a small section of wall and the indications that the floor had been paved with sandstone slabs constituted the returns from this site.

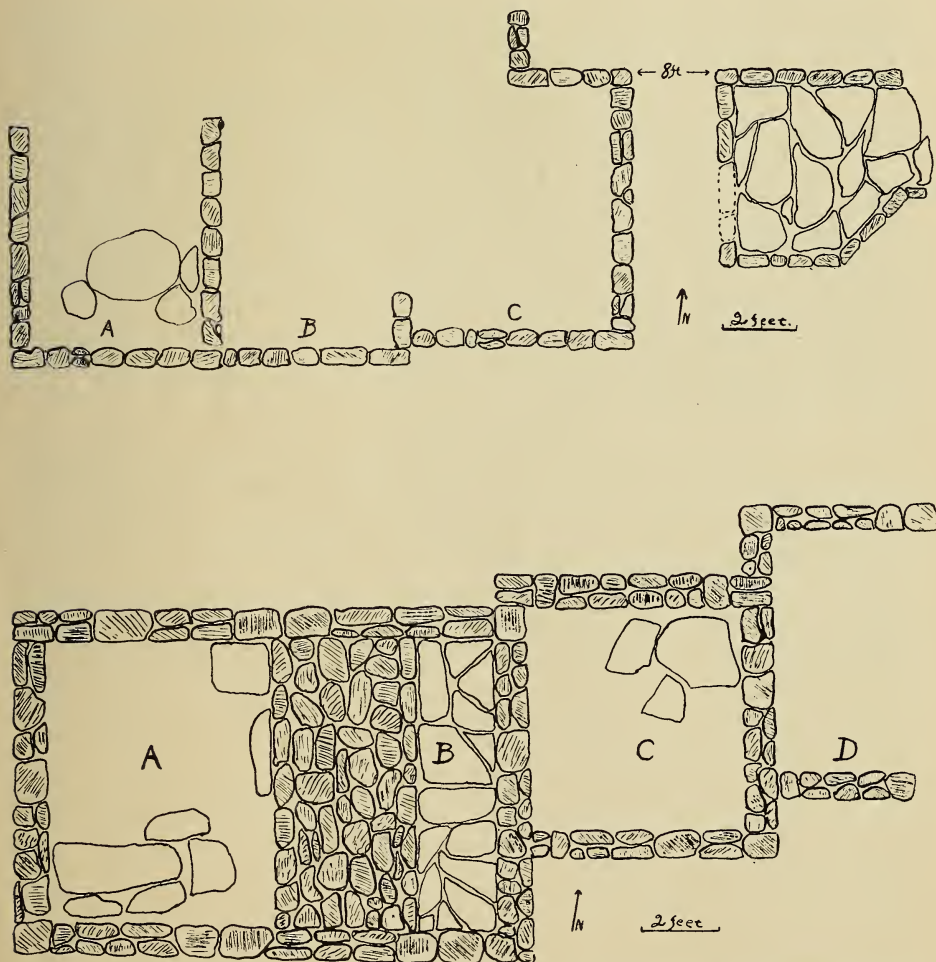


Plate 2. Ground Plans of Ruins Piedra No. 1 and Piedra No. 2. Upper, Piedra No. 1; Lower, Piedra No. 2.

PIEDRA NO. 1.

This ruin is located at a distance of about two miles south of the No. 3 group just described, and is on a similar bench to the east of the river. Piedra No. 1 is one of a group of mounds lying on a spur jutting out from the general elevation which terminates in the Piedra Parada mesa. The weathering caused by the washing of surface water across this site made it impossible to determine the appearance and extent of the original building. The north wall was entirely gone and portions of other walls had also disappeared. (Plate 2, Upper.)

The walls average between 6 and 7 inches in thickness, are of the slab type of construction made of sandstone laid, in some cases, on a cobblestone foundation and, at other points, an adobe base. At the highest portion now standing they rise only 18 inches above the surface of the ground.

Eight feet east of this group of three rooms is a small inclosure with walls of but one course in height, there being no indications that they had originally been higher. The east wall and a portion of the west were missing. The floor was paved with thin sandstone slabs. At the present time there is no solution as to the probable nature of this room, if it may be called such.

The debris which filled the rooms of this group consisted of burned roof material, not sufficient to give an idea of the type of construction, stones from the walls, drift sand, adobe from the plaster and the roof, and a thin layer of ashes and charcoal directly on the floor.

Artifacts found in this ruin consist of: Coiled ware vessel of the elongated flower-pot shape; plain ware bowl, shattered; a scoop made from a piece of black-on-white ware; petrified wood fetish; loving cup, of the two-necked variety seen along the Rio Grande, shattered; an excellent stone door; several manos; pecking stones; a large stone maul and a large sandstone spear point. Several feet outside of the south wall a small ladle was found. This is of the type called ceremonial by some investigators, and children's toys by others.

West and south of this ruin is a group of mounds which indicate other dwellings. In the south portion of the group is a circular depression which suggests the existence of a kiva or circular ceremonial room. If this is a kiva, the entire configuration of the mound would lead to the belief that this is a variation of the type of Unit-House excavated by Dr. T. Mitchell Prudden in the Montezuma valley south of Cortez, Colorado. The only answer to this theory, however, lies beneath the mound and the clearing of the debris from the ruin would be necessary before a definite conclusion could be reached.

PIEDRA NO. 2.

This building is located on a spur of the bench to the east of the Piedra about 100 yards north of Piedra No. 1. The tongue of land on which Piedra No. 1 is situated, is separated from that of Piedra No. 2 by a deep draw which has been cut by the rushing waters from the melting snows on the mesa above and from the heavy rains of countless summers. This structure is very similar to that of Piedra No. 1, although in a better state of preservation than its neighbor. (Plate 2, Lower.) It is of the advanced type of pit-house or what might perhaps better be called a unit-type of house, as it appears to have stood originally entirely above ground. It was apparently a four-room dwelling although the east wall and portions of the north and south walls of Room D have disappeared. Because of this it was impossible to tell the former extent of the compartment and whether or not there were additional rooms. It is not likely, however, that there were more inclosures to the east as the debris was not such as to indicate their existence.

The rooms in Piedra No. 2 vary in size. The walls are of the horizontal slab with cobblestone base construction and average from 10 to 12 inches in thickness. An exception will be noted between Rooms A and B where the wall is unusually thick, measuring 3 feet 6 inches across. The thickness of this wall and the size of Room B are the only features which stand out as distinct in the architecture of this building. Room A was partially paved with thin slabs, while Room B was entirely paved. There were traces of paving in Room C, while Room D was so badly weathered that it would not be safe to conclude whether it was paved or not. However, no portions of paving slabs were found in the clearing of this room.

The paving of portions, and in some cases the entire surface, of the floor as noted in the various dwellings here discussed is not unusual, for similar

characteristics have been found in the Megalithic House excavated by Dr. J. W. Fewkes at Mesa Verde and in the slab or pit-houses uncovered by Mr. Earl Morris in the Johnson Canyon region. This same feature has been noted also in other areas where examples of the earlier stages of building development are found.

From the standpoint of specimens uncovered during the summer, Room A ranks as the greatest find. It contained three burials accompanied by the customary mortuary offerings. The first skeleton removed was in a good state of preservation. The body had been buried in the natal or sitting position in the northeast corner of the room, its back against the north wall. The skull had fallen backward into a bowl that had been placed behind the person, presumably at the time of burial. This was in all probability responsible for the shattered condition of the bowl, which was of the black-on-white variety. Five pipes of rather unusual form resembling the modern clay pipe, only much larger (one of them having two bowls placed side by side on the stem), were found between the knees of the skeleton. To the right were two bowls, shattered, of the black-on-white ware. Further to the right and against the north wall stood a large coiled ware vessel containing finely powdered quartz which, as Mr. Jeancon suggested, was probably intended for tempering the clay from which the pottery was made. Several inches in front of this piece of pottery was a small plain ware pitcher of good shape and workmanship and another of the black-on-white bowls. All of these pieces, with the exception of the pitcher, had been broken at the time the roof fell in.

At a short distance in front of the skeleton and about two feet from the east wall was a black-on-white ware figurine which clearly shows that it was modeled after a mountain sheep. The workmanship on this object was extremely fine, and the likeness so striking that it was recognized immediately. It was unquestionably an object of ceremonial usage. The sheep measures $8\frac{1}{2}$ inches from the top of its head to the bottom of its front feet and the body is $6\frac{1}{2}$ inches long. In the southeast corner was another large coiled vessel, badly shattered, containing pieces of quartz which were evidently to be used for powdering as a stone mortar was lying beside the pot.

The other skeletons had been disturbed by badgers. These animals had driven a burrow through the room, and scattered the bones more or less. It appeared, however, that one person had been buried lying in the flexed position across the center of the room, with the head to the east, while the other had been buried with his back against the west wall. The bones of both these skeletons were in a poor state of preservation. The skull of one had been crushed by a falling stone, and the skull of the other soon went to pieces upon being exposed to the air. All of the skulls were of the typical deformed type, having been flattened artificially at the back.

That Room B evidently had contained a burial is suggested by a portion of a skull and several pieces of bones found in the west end. Disintegration was so complete that it was impossible to remove the fragments intact. Room B also contained two of the large coiled ware vessels, both of which had been shattered by falling stones from the walls.

Rooms C and D yielded only a few sherds of the plain and coiled varieties. A piece of a small bowl, sufficient for reconstruction, was found some distance beyond Room D while efforts were being made to find the east end of the building.

The debris which filled the interior of the rooms was composed of stones from the walls, a great amount of adobe from the roof and wall plastering, some drift sand and, near the floor, a thin layer of house dirt. Since there were no signs to indicate that the roof had burned, it is logical to conclude that this portion of the building remained intact until the supporting beams rotted away, allowing the covering to collapse.

In the effort to determine the extent of the building, trenches were dug on the outside to see if there were other inclosures. But the excavations failed to uncover additional walls; hence it is safe to assume that the ground plan in this report is correct.

Southwest of Piedra No. 2, at a distance of from 25 to 30 feet, is another mound which, judging from surface indications, covers a group of rooms adjacent to a kiva. This mound resembles to a marked degree the one mentioned in connection with Piedra No. 1. The time at the disposal of the expedition did not warrant the attempt to excavate this unit.

WORK ON THE LARGE PUEBLO.

After the excavation of Piedra No. 2 was completed, work was resumed on the large pueblo or community house on the top of the Piedra Parada or Chimney Rock mesa. During the season of 1921 a large kiva, the East Kiva, and five rectangular rooms, as well as a portion of six small rooms along the south and east sides of the rectangular inclosure surrounding the kiva were excavated, (Plate 3). After surveying the ruin, we decided to devote the remainder of the 1922 season to clearing the unit west of the East Kiva. Between the East and West Kivas is a row of five rooms; these and the West Kiva with its adjoining compartments comprise the unit excavated during the summer of 1922. Previous to excavation it appeared as though there were but four rooms between the two kivas and on the ground plan contained in the report "Archaeological Research In the Northeastern San Juan Basin of Colorado During the Summer of 1921," but four are indicated. These are numbers 31, 32, 33 and 34 respectively. The work of last summer showed, however, that there are five, and they will be designated temporarily in this report as 31, 32, 33, 34 and 35.



View of the Unit Excavated in the Large Pueblo. Rooms 34, 33, 32 and 31 in the Foreground. The West Kiva and Its Two Compartments in the Left Center.

All of these rooms approximate the rectangular type, although it will be seen from a glance at the accompanying ground plan, (Plate 3), that they are slightly irregular in form, the width at the southwest end, in some cases, being narrower than that at the northeast. The walls of this portion will average 2 feet 6 inches in thickness. They are constructed of dressed slabs of sandstone of the type of which the cap-rock of the mesa is formed. They are well laid up and show a rather highly developed sense of masonry although there are no broken joints, except where these are accidental, and no tied-in corners. In this section of the building the type of wall seen at Aztec and the Chaco Canyon is particularly noticeable. That is, the courses formed of the large slabs are separated by several courses of very thin, small pieces of stone. This type of construction was also found in the walls of Room A in Piedra No. 2. The weathering on the walls shows that for a long period after the roof and ceilings fell, the building stood exposed to the elements, the protecting fill of windblown sand and the rock from the upper courses of the walls having filled in the rooms only after they had stood open for a great many years. The greatest erosion is noted on the north and east walls showing that the prevailing winds must have come from the south.

Indications point to the fact that this must have been the older section of the building since the walls are not in as good condition as those of the unit excavated in 1921. The masonry is also of a poorer quality of workmanship. These factors alone would not justify such a conclusion, but the finding of rather large amounts of rubbish, house sweepings, bones of several kinds of animals, a considerable amount of broken pottery, etc., suggests the abandonment of these rooms and their subsequent use as dumping places for refuse,—features which would support the theory just advanced.

These rooms were filled, in addition to the refuse and house dirt found lying on the floors, with burned roofing material, plaster from the walls, adobe from the ceilings and roof, a large amount of stone from the walls and wind-blown sand. The burned roofing material was in a position which clearly indicated that the structure was two stories high at this point and that the ceilings were of the Aztec and Chaco type, heavy beams across the narrow portion of the rooms and small poles running lengthwise.

Room 32 contained a doorway of the inverted keystone shape in the west wall. This was the only door in the series of rooms and had connected Room 32 with the small compartment formed by the straight wall of the rectangle surrounding the West Kiva and the curved wall of the kiva. The sill is 2 feet 7 inches from the floor. The door is placed 2 feet 6 inches from the north wall, at the bottom, and 2 feet 9 inches from the same wall at the top. The sill is 1 foot 11 inches from the south wall and the top 2 feet 1 inch. The door measures 1 foot 5 inches wide at the sill, 11½ inches at the lintel and is 2 feet 11 inches high. It was filled with fallen stones from the wall above.

Room 35 yielded a large number of sherds of the black-on-white, red, plain and coiled varieties of pottery. Enough pieces were obtained to make possible reconstruction of several bowls and globular shaped vessels. In addition to this, several pieces of turquoise originally used for inlay work, a burned pendant, bone awls, and scraping tools were secured.

Room 34 did not furnish much in the way of artifacts, the only specimens being a bone bead, a long blade-like instrument probably used in the tanning of hides, and a piece of a black-on-white ware bowl, the remainder of which had been found in Room 35. Room 33 yielded a few sherds from a piece of coiled pottery and a few black-on-white pieces, one bone awl, one large bone bead and a piece of bone which had been highly polished, the use of which is unknown. Rooms 32 and 31 contained but a small number of sherds.

The average depth from the top of the standing wall to the floor is 11 feet at the east ends of the various rooms and varies from 5 feet at the west end of Room 35 to 8 feet at the west end of Room 31. The walls running north and south or the east and west walls of these rooms were built at one time, while the walls running east and west were filled in after the former had been built.

A rather interesting feature of this unit, and one similar to what the 1921 excavations disclosed, is that of the compartments formed by the rectangular inclosure surrounding the West Kiva. Two rooms of this type were uncovered just west of the group of five described above. The south compartment was the first excavated, and it furnished a large amount of broken pottery, many pieces of which it is possible to restore, arrowheads, bone instruments, and two pieces of turquoise, one a portion of a pendant, the other from an inlay. The debris was similar to that removed from the other rooms but gave more evidence of the place having been used as a dump. It is a large inclosure as the diagram shows. The wall between the north and south compartments was not built on the cap-rock of the mesa, as were the other walls, but on top of a dirt fill one foot in depth, showing that it had been placed there after the original walls were constructed. The east and west walls had smooth facing, but the straight wall on the south and the curved kiva wall were not trued at the time of construction and present a rough surface.

In the north compartment the debris was similar to that in the south. The inclosure was much smaller than the one just described. A small wall connects the north and kiva walls at the west. This is similar to the one between the rooms under consideration. It was into this room that the doorway previously mentioned opened. A few pieces of bone, some potsherds and a stone axe came from this room. The axe is of a rather unusual type for this region, being of the two-edged variety more commonly attributed to the plains Indians.

The West Kiva proved to be one of the most interesting rooms excavated during the summer. In the report of the work for 1921 it was referred to as the small kiva of the ruin, but upon excavation it was found to be practically as large as the one uncovered the previous season. As the erosive influences had been stronger on the southwest side of the community house, the walls of this kiva are in a poor state of preservation. The outer wall had fallen away on the southern half to the level of the top of the banquette or inner wall, and at one place even below the banquette. The construction of the walls was simi-

lar to that previously mentioned, although somewhat better, smaller stones were used.

Many of the features common to the Mesa Verde type of kiva are missing. The room under consideration has no Sipapu, ceremonial opening to the under world, no pilasters for supporting the roof beams and apparently no deflector. There is a wall which might have served for a deflector but it is on the west side of the fireplace, not between it and the ventilator opening where it would of necessity have to be if it served the purpose of a deflector. The solution which first presented itself with respect to this problem was that the length of wall to the west was simply one portion of a deflector which had entirely



The West Kiva with Its Two Compartments in the Foreground.

surrounded the firepit on three sides. The fact that no signs of wall construction were found on the other two sides precludes such a possibility. A few indications on the north side of the fireplace suggested the belief that there had been a wall at that point, but the relation of such a wall to the wall on the west could not be established. It is more probable that the stones had fallen, in the position in which they were found, at the time of the burning of the roof. If, however, this portion of wall had originally joined that on the west, it is impossible to explain the arrangement of a firepit inclosed on two sides, especially as those two were on the north and west, while the ventilator opening was on the southeast.

The fireplace had been built up from the floor and stands at a height of 1 foot 10 inches above that level. The pit is circular in form measuring 3 feet 2 inches in diameter. It was filled with ashes at the time of excavation. A curious fact in connection with the fireplace is that the bottom of the ventilator opening in the wall of the kiva is the same height above the floor, 1 foot 10 inches. The probabilities are that after the kiva was constructed, with the ventilator at the mentioned height above the floor, it was found necessary to raise the fire level in order to secure the desired benefits from the ventilator. Another theory which suggests itself is that this kiva was used in connection with the ceremonial fire, and that the fireplace was elevated, similar to those in structures in other regions of the southwest which are known to have been used for this purpose, with that object in view.

The ventilator of the West Kiva is very unlike that of the East Kiva in so far as it does not have the horizontal shaft extending into the room. The walls were shattered to such an extent at this point that it is impossible to state just how the ventilator originally appeared; but following the general

type of such openings we are fairly safe in stating that the outer wall of the kiva contained the perpendicular shaft. Burned material found in the horizontal shaft, in the walls, indicated that the opening had been covered by wooden poles, plastered on top, in order to make an unbroken surface of the banquette top. A large stone was found lying in the opening of the ventilator. This just fit the opening and may have been used in the capacity of a movable deflector, to regulate the inrush of fresh air. The horizontal shaft of the ventilator measures 2 feet 4 inches from the bottom of the shaft to the top of the banquette. It is 1 foot 11 inches in width, 5 feet 5 inches in length. At the south or more correctly, the southeast end, there is the remnant of a wall which originally closed the opening. This bit of masonry is 1 foot 2 inches in thickness and stands to a height of 1 foot.

Because of the sloping surface of the mesa top the builders found it necessary to level the kiva floor by means of a sand fill. The floor level was readily discernible and at the west side of the kiva a foot of sand had been filled in to make the surface conform to that on the east where the adobe flooring was applied directly to the cap-rock.

The remains of burned timbers found in the debris in the excavation of the kiva were lying in such a manner as to indicate beyond a doubt that the building had been covered with the prevailing type of what is known as the cribbed roof. The beams had been laid, apparently, on the banquette as there were no signs of pilasters of any type whatsoever. The beams averaged from 6 to 8 inches in diameter, judging from the charred remains which were measured at the time of removal. The north side of the roof was the first to fall, the south remaining intact for a much longer period. This was evidenced by the fact that on the north the burned remnants were lying on the floor while on the south and southeast several feet of drift sand was between the floor and the beams.

One whole piece of pottery of the black-on-white ware, which gave the appearance of two open bowls joined together, was found here. From the many black-on-white sherds recovered it was possible to restore several additional pieces of pottery. Most of one red ware bowl and a great many sherds of the coiled variety were also secured.

From the top of the banquette, which is 2 feet 8 inches wide, to the floor the measurements are: east side, 4 feet 2 inches; north, 4 feet 10 inches; west, 5 feet; south, 4 feet 5 inches. On the north side of the kiva the wall stands 3 feet above the top of the banquette. The same is true on the east, but on the west the height is only 1 foot 8 inches. On practically the entire southern arc of the circle the outer wall is level with the top of the banquette.

Work was started on the compartments west of the kiva, which are similar to those already described on the east. But the walls of these were in such bad condition that it was deemed advisable to leave the rooms uncleared in order to keep them from collapsing entirely. The north and south walls of the rectangle were traced to the points where they join the west. In the north wall another doorway was found. It is of the rectangular type, 2 feet wide. Its height could not be determined as the wall has fallen away until but two feet remain above the level of the door-sill. This opening is 2 feet 10 inches from the juncture of the straight wall and the kiva wall. On the north side these two walls fuse into one as will be seen from a glance at the drawing.

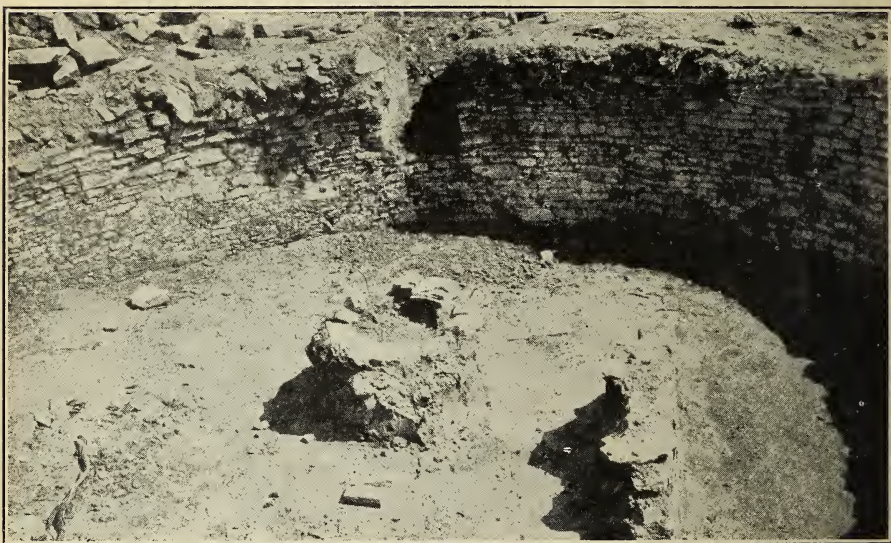
At the completion of this work the extreme western walls of the pueblo were traced and the form of the building determined. It will be noted by the dotted lines at the southern corner that there were no remaining walls at that point, but the quantity of debris was sufficient to show that there had originally been masonry completing the corner as suggested by the ground plan.

CONCLUSION.

From the facts at hand at the present time it is reasonably safe to conclude that the peoples who built the structures found along the Piedra River were to a great degree related to the other San Juan groups, who left as their monuments the great ruins at Aztec and the Chaco Canyon. The masonry as well as other similarities of architecture and of pottery point strongly to such a relation. The pottery is so similar to that from the Chaco in both the design element and method of construction as to make it practically impossible to

tell, in many instances, from which area the vessel came. The Piedra Parada ware appears to be of an earlier development, however.

Another interesting feature in regard to the pottery is that with each higher type of house studied the pottery shows a corresponding step forward. Very crude forms are found in the earliest types of the pit-houses and the highest type of design, both in element and execution, found in the entire region came from the large ruin on the mesa top. The intermediate houses show a corresponding pottery type.



Interior View of the West Kiva Showing Raised Fireplace and Short Wall.

The work of the 1922 season also served to strengthen the tentative theory advanced by Mr. Jeancon to the effect that the area under consideration saw the complete cultural development of the inhabitants, from their earliest stages to the more advanced community-house culture with its attendant perfection in ceramics. Nothing was found to controvert the theory of house-type evolution as advanced in the report for 1921, and in fact the work of the last season would tend to strengthen this conclusion.

The foregoing report is only in the nature of a preliminary account of the season's work and has for its purpose merely the relating of what was actually done without making many necessary comparisons and without drawing detailed and extensive conclusions. The regular report of the activities of the expedition will give in detail what this paper has sketched in a general way. There are a number of points that it would be impossible to give conclusions on at this time. Further study and excavation are necessary before some of the problems can even be tentatively solved.